

ISolar SM Off-Grid Inverter



- Pure sine wave inverter
- Output power factor 1 (only 0.8 for 3KP/5KP models)
- Built-in MPPT solar charge controller
- Selectable input voltage range for home appliances and personal computers
- Selectable charging current based on applications
- Configurable AC/Solar input priority via LCD setting
- Compatible to mains voltage or generator power
- Auto restart while AC is recovering
- Overload and short circuit protection
- Battery equalization for optimized battery performance and lifecycle
- Cold start function
- Parallel operation with up to 9 units only available for Expert MKS 3KP/4K VA/5KVA/5KP*

Off-Grid Inverter

ISolar SM Off-Grid Inverter Selection Guide

MODEL	ISolar SM 1K-12	ISolar SM 2K-24	ISolar SM 3K-24	ISolar SM 3KP-24	ISolar SM 4K-48	ISolar SM 5K-48	ISolar SM II 5K-48	ISolar SM 5KP-24
Rated Power	1000VA/ 1000W	2000VA/ 2000W	3000VA/ 3000W	3000VA/ 2400W	4000VA/ 4000W	5000VA/ 5000W	5000VA/ 5000W	5000VA/ 4000W
Parallel Capability	No	No	No	Yes, 9 units	Yes, 9 units	Yes, 9 units	Yes, 9 units	Yes, 9 units
INPUT								
Voltage	230 VAC							
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)							
Frequency Range	50 Hz/60 Hz (Auto sensing)							
OUTPUT								
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%							
Surge Power	2000VA	4000VA	6000VA		8000VA	10000VA		
Efficiency (Peak)	90% - 93%	93%		90%	93%	93%	90%	90%
Transfer Time	10 ms (For Personal Computers) ; 20 ms (For Home Appliances)							
Waveform	Pure sine wave							
BATTERY								
Battery Voltage	12 VDC (24VDC and 48VDC versions are also available)	24 VDC	24 VDC (48VDC version is also available)	24 VDC	48 VDC			24 VDC
Floating Charge Voltage	13.5 VDC	27 VDC	27 VDC	27 VDC	54 VDC	54 VDC Max: 58VDC (optional 64VDC, please check with sales)	54 VDC	27 VDC
Overcharge Protection	15.5 VDC	31 VDC	31 VDC	30 VDC	60 VDC	60 VDC (optional 66VDC, please check with sales)	63 VDC	30 VDC
SOLAR CHARGER & AC CHARGER								
Maximum PV Array Power	500 W	600W	600W	1000W	4000W		4500W	2000W
MPPT Range @ Operating Voltage	15 VDC ~ 80 VDC	30 VDC~ 66 VDC	30 VDC~ 66 VDC	30 VDC~ 80 VDC	60 VDC~ 115 VDC		120 VDC~ 430 VDC	30 VDC~ 115 VDC
Maximum PV Array Open Circuit Voltage	102 VDC	75VDC	75VDC	100VDC	145 VDC		450 VDC	145 VDC
Maximum Solar Charge Current	40A	25A	25A	40A	80 A		80 A	80A
Maximum AC Charge Current	20A	30A	30A	60A	60 A		80 A	60A
Maximum Charge Current	60A	55A	55A	100A	140 A		80 A	140A
PHYSICAL								
Dimension,DxWxH (mm)	95 x 240 x 316	100 x 272 x 355		100 x 272 x 385	120 x 295 x 468			180 x 310 x 475
Net Weight (kgs)	5.2	7.0	7.4	7.5	12.5	13.5	11	12.5
ENVIRONMENT								
Humidity	5% to 95% Relative Humidity (Non-condensing)							
Operating Temperature	0°C - 55°C							
Storage Temperature	-15°C - 60°C							

* Typical transfer time for parallel operation is 30ms.
Product specifications are subject to change without further notice.